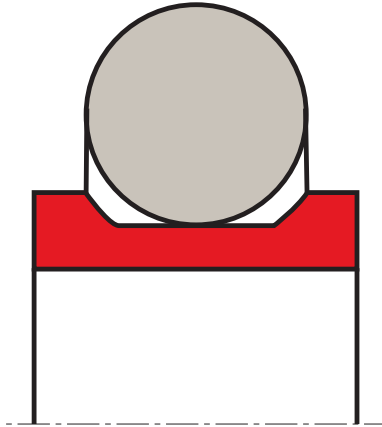


rod seal S09-SC

seal spec



description

the rod seal S09-SC, consisting of a PTFE rod sealing ring and an O-Ring, is a system for sealing rods and plungers in hydraulic cylinders. the sealing set S09-SC is appropriate for dynamic applications as an alternative to an O-ring, for situations where sealing performance and friction have to be optimized.

application



category of profile

machined or molded/standard/trade product.

double acting

the S09-SC seal is designed for use as a piston seal.

area of application: hydraulics

please apply this seal only in combination with guiding elements.

advantages

- minimal break-out and dynamic slide friction. therefore no stick-slip. steady movement is guaranteed even at low velocities.
- low wear.
- high extrusion resistance
- high temperature resistance.
- compatibility with nearly all media due to the high chemical resistance of the rod sealing ring, and a wide selection of O-ring compounds.
- can be used in existing O-ring grooves.
- available in diameters up to 2000 mm.

operating parameters & material

material		temperature	max. surface speed	max. pressure ¹
sealing element	energizer			
s-mart PTFE carbon	s-mart NBR (70 shore A)	-30 °C ... +100 °C	4 m/s	350 bar (35 MPa)

the stated operation conditions represent general indications. it is recommended not to use all maximum values simultaneously. surface speed limits apply only to the presence of adequate lubrication film.

¹ pressure ratings are dependent on the size of the extrusion gap.

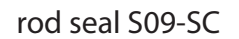
² attention: not suitable for mineral oils!

surface quality

surface roughness	Rtmax [µm]	Ra [µm]
sliding surface	≤2	≤0,05-0,3
bottom of groove	≤6,3	≤1,6
groove face	≤15	≤3

tolerance recommendation

seal housing tolerances	
Ød	f7
ØD	H9



for diameters < 10 mm open grooves are required.

please note that we are able to produce those profiles to your specific need or any non standard housing. for detail measurements, please see seal-mart catalog...



housing dimensions for O-Ring grooves with 1 back-up ring:

housing dimensions for O-Ring grooves with 2 back-up ring:

don't hesitate to contact our technical department for further information or for special requirements (temperature, speed etc.), so that suitable materials and/or designs can be recommended.